

ABSTRACT

An excimer or molecular fluorine laser system includes a discharge chamber filled with a gas mixture, multiple electrodes within the discharge chamber and connected to the discharge circuit for energizing the gas mixture, a resonant cavity including the discharge chamber for generating a laser beam, and an intracavity homogenizer for homogenizing an intensity profile of the laser beam generated in the resonator. The intracavity homogenizer may include each of a first bi-prism and a second bi-prism disposed at opposite ends of the resonant cavity and having the discharge chamber disposed therebetween. In this case, optical axes of the first bi-prism and the second bi-prism are each at least substantially parallel to the optical axis of the laser beam.

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